SONY

4-093-901-61 (1)

FD Trinitron WIDE Colour Television

Instruction Manual

GB

KV-28FQ70U KV-32FQ70U

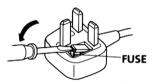
NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS 1362 (i.e. marked with $\widehat{\circledast}$ or $\widehat{\nabla}$) must be used.

When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.



How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.

IMPORTANT

If the plug supplied is not suitable for the socket outlets in your home, it should be cut off and an appropriate plug fitted in accordance with the following instructions:

The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral Brown Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. Do not connect either wire to the earth terminal in the plug which is marked by the letter E or by the safety earth symbol $\frac{1}{2}$ or coloured green or green and yellow.

WARNING

- To prevent the risk of electric shock, do not insert the plug cut off from the mains lead into a socket outlet. This plug cannot be used and should be destroyed.
- To prevent the risk of fire or electric shock, do not expose the unit to rain or moisture.
- Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing
 to qualified personnel only.

Introduction

Thank you for choosing this Sony FD Trinitron Colour Television.

Before operating the TV, please read this manual thoroughly and retain it for future reference.

- Symbols used in the manual:
 - M Important information
 - **1** Information on a feature.
 - •1,2... Sequence of instructions.
- Shaded buttons on the remote control show you the buttons you have to press to follow the sequence of the instructions.
- S Informs you of the result of instructions.

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Safety Information



This set is to operate on a 220-240V AC supply only. Take care not to connect too many appliances to the same power socket as this could result in fire or electric shock.



For environmental and safety reasons, it is recommended that the TV set is not left in standby mode when not in use. Disconnect from the mains.



Never push objects of any kind into the set as this could result in a fire or electric shock. Never spill liquid of any kind on the set. If any liquid or solid object does fall into the cabinet, do not operate the TV. Have it checked immediately by qualified personnel.



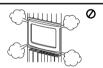
Do not open the cabinet and the rear cover of the TV. Refer to qualified service personnel only.



For your own safety, do not touch any part of the TV, power lead or aerial lead during lightning storms.



To prevent fire or shock hazard, do not expose the TV to rain or moisture.



Do not cover the ventilation openings of the TV For ventilation, leave a space of at least 10cm all around the set.



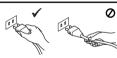
Never place the TV in hot, humid or excessively dusty places. Do not install the TV where it may be exposed to mechanical vibrations.



To prevent fire, keep inflammable objects or naked lights (eg candles) away from the TV.



Clean the screen and cabinet with a soft, lightly dampened cloth. Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or antistatic spray. As a safety precaution, unplug the TV before cleaning it.



Pull out the power lead by the plug. Do not pull on the power lead itself.



Take care not to place heavy objects on the power lead as this could result in damage. We recommend you wind any excess lead around the holders provided on the rear of the TV.



Place the TV on a secure stable stand. Do not allow children to climb on to it. Do not place the TV on its side or face up.

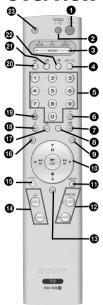


Unplug the power lead before moving the TV. Avoid uneven surfaces, quick steps or excessive force. If the set has been dropped or damaged, have it checked immediately by qualified service personnel.



Do not cover the ventilation openings of the TV with items such as curtains or newspapers etc.

Overview of Remote Control Buttons



1 To Temporarily Switch Off TV:

Press this button to temporarily switch off TV (the standby indicator $\mbox{\o}$ on the TV lights up). Press again to switch on TV from standby mode. To save energy we recommend switching off completely when TV is not in use.

After 15 minutes without a signal and without any button being pressed, the TV switches automatically into standby mode.

- **2 VCR or DVD on/off:** Press this button to switch your VCR or DVD on or off.
- Media Selector:

With this remote control you can operate not only this TV but also the main functions of your VCR or DVD. Switch on the device you want to operate and next press this button repeatedly to select the VCR, TV or DVD. A green light will be momentarily lit to indicate the chosen function.

Before the first time you want to control a DVD or VCR by using this remote control, you have to set it up depending on the brand of the device to be used. For more details, refer to chapter "Remote Control Configuration for VCR or DVD" on page 22.

3 Selecting input source: Press this button repeatedly until the desired input symbol of the source appears on the TV screen.

6 Selecting channels:

If Media Selector is switched to TV or VCR, press this button to select channels.

For double-digit programme numbers, enter the second digit within 2.5 seconds.

(a) If Media Selector is switched to TV:

Press this button to watch the last channel selected (the last channel watched for at least 5 seconds).

b) If Media Selector is switched to VCR:

For Sony's VCR double-digit programme numbers, e.g. 23, press -/-- first and then the buttons 2 and 3.

- Selecting screen format: Press this button repeatedly to change the format of the screen. For more details refer to chapter "Auto Format" on page 11.
- **13** This button only works in Teletext mode.
- Selecting Teletext: Press this button to switch on teletext.
- Joystick:

a) If Media Selector is switched to TV:

- When MENU is switched on, use these buttons to operate the menu system. For details refer to "Introducing and Using the Menu System" on page 9.
- page 9.

 When MENU is switched off, press OK to show a channel overview. Then press

 to select the channel and then press again the OK button to watch the selected channel.
- b) If Media Selector is switched to VCR or DVD:

Using these buttons you can control the main functions of your VCR or DVD.

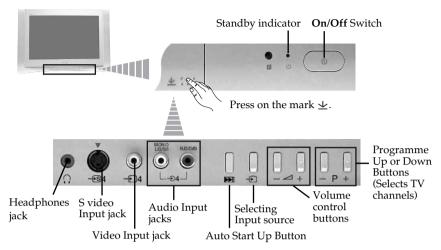
- Displaying the menu system: Press this button to display the menu on the TV screen. Press again to remove the menu display from the TV screen.
- **② Selecting channels:** Press these buttons to select the next or previous broadcast channel.
- **(9) NexTView:** For more details refer to chapter "NexTView" on page 18.

- **4** Adjusting TV volume: Press these buttons to adjust the volume of the TV.
- **® Recording button:** If Media Selector is switched to VCR, press this button to record programmes.
- **6 Selecting TV mode:** Press this button to switch off PIP, teletext or video input.
- **To Selecting Picture mode:** Press this button repeatedly to change the picture mode.
- **® Selecting Sound effect:** Press this button repeatedly to change the sound effect.
- **Displaying on Screen information:** Press this button to display all on-screen indications. Press again to cancel.
- Freezing the picture: Press this button to freeze the picture. The screen is divided into two screens. On the left with the normal picture, on the right the picture is freezed. Press this button again to return to the normal picture.
- **3 Swapping screens:** Whilst you are in "PIP" mode, press this button to swap the two screens.
- **② PIP (Picture in Picture):** Press this button to watch another source in a small picture (PIP) within the main TV picture. Press again to cancel. To select the source you want to watch, refer to the chapter "PIP Input" on page 12.
- **Muting the Sound:** Press this button to mute TV sound. Press again to restore the sound.



Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to "Teletext" section on page 17.

Overview of TV Buttons

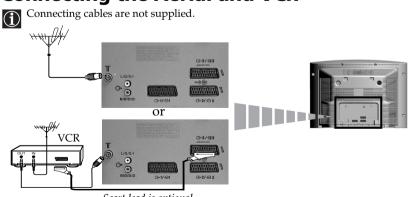


Inserting Batteries into the Remote Control

Make sure you insert the supplied batteries using the correct polarities. Always remember to dispose of used batteries in an environmental friendly way.



Connecting the Aerial and VCR



Scart lead is optional.

For more details of VCR connection, please refer to the section "Connecting Optional Equipment" of this instruction manual (see page 20).

Switching On the TV and Automatically Tuning



The first time you switch on your TV, a sequence of menu screens appear on the TV enabling you to: 1) choose the language of the menu screen, 2) adjust the picture slant, 3) search and store all available channels (TV Broadcast) and 4) change the order in which the channels (TV Broadcast) appear on the screen.

However, if you need to change any of these settings at a later date, you can do that by selecting the appropriate option in the 🖨 (Set Up menu) or by pressing the Auto Start Up Button on the TV set.

1 Connect the TV plug to the mains socket (220-240V AC, 50Hz)

The first time that the TV set is connected, it is usually turned on. If the TV is off, press the **O** on/off button on the TV set to turn on the TV.

The first time you switch on the TV, a Language menu displays automatically on the TV screen.



2 Press the ◆ or ◆ button on the remote control to select the language, then press the **OK** button to confirm your selection. From now on all the menus will appear in the selected language.





- **3** Because of the earth's magnetism, the picture might slant. The Picture Rotation menu allows you to correct the picture slant if it is necessary.
 - **a)** If it is not necessary, press **OK** to select **Not necessary**.
 - **b)** If it is necessary, press ◆ or ◆ to select **Adjust now**, then press **OK** and correct any slant of the picture between -5 and +5 by pressing \bullet or \spadesuit . Finally press OK to store.



4 The **Auto Tuning** menu appears on the screen. Press the OK button to select Yes.





5The TV starts to automatically search and store all available broadcast channels for you.



This procedure could take some minutes. Please be patient and do not press any buttons, otherwise automatic tuning will not be completed.



(i)

In some countries the TV Broadcaster installs the channels automatically (ACI system). In this case, the TV Broadcaster sends a menu in which you can select your city by pressing the \bullet or \bullet button and OK to store the channels.



If no channels were found during the auto tuning process then a new menu appears automatically on the screen asking you to connect the aerial. Please connect the aerial (see page 6) and press **OK**. The auto tuning process will start again.





- After all available channels are captured and stored, the Programme Sorting menu automatically appears on the screen enabling you to change the order in which the channels appear on the screen.
 - a) If you wish to keep the broadcast channels in the tuned order, go to step 7.
 - **b)** If you wish to store the channels in a different order:
 - 1 Press the ◆ or ♠ button to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press the **b**utton.
 - 2 Press the \bullet or \bullet button to select the new programme number position for your selected channel (TV Broadcast), then press OK.
 - **3** Repeat steps b)1 and b)2 if you wish to change the order of the other channels.









7 Press the **MENU** button to remove the menu from the screen.





Your TV is now ready for use

Introducing and Using the Menu System



Your TV uses an on-screen menu system to guide you through the operations. Use the following buttons on the Remote Control to operate the menu system:

1 Press the **MENU** button to switch the first level menu on.



- **2** To highlight the desired menu or option, press ◆ or ◆.
 - To enter the selected menu or option, press .
 - To return to the last menu or option, press •.
 - To alter the settings of your selected option, press ◆/◆/◆ or ◆.
 - To confirm and store your selection, press **OK**.



3 Press the MENU button to remove the menu from the screen.





Menu Guide

Level 1

Level 2



Level 3 / Function

PICTURE ADJUSTMENT

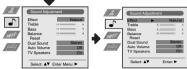
The "Picture Adjustment" menu allows you to alter the picture adjustments.

To do this: after selecting the item you want to alter press \spadesuit , then press $\bigstar/\spadesuit/\spadesuit$ or \spadesuit repeatedly to adjust it and finally press OK to store the new adjustment.



- This menu also allows you to customise the picture mode based on the programme you are watching:
 - **Picture Mode** ◆ **♦** *Live* (for live broadcast programmes, DVD and Digital Set Top Box receivers).
 - **◆ Personal** (for individual settings).
 - **◆ Movie** (for films).
 - Brightness, Colour and Sharpness can only be altered if "Personal" mode is selected.
 - *Hue* is only available for NTSC colour signal (e.g. USA video tapes).
 - *Select Reset* and press **OK** to reset the picture to the factory preset levels.
 - The Noise Reduction option is set to AUTO to automatically reduce the picture noise visible in the broadcast signal. To cancel this function, select "Off" instead of "AUTO".





SOUND ADJUSTMENT

The "Sound Adjustment" menu allows you to alter the sound adjustments.

To do this: after selecting the item you want to alter, press \blacklozenge . Then press $\blacklozenge/\spadesuit/\spadesuit$ or \blacklozenge repeatedly to adjust it and finally press **OK** to store the new adjustment.

Effect

Natural:

Enhances clarity, detail and presence of sound by using "BBE High Definition Sound system"*.

Dynamic:

"BBE High Definition Sound system"* intensifies clarity and presence of sound for better intelligibility and musical realism.

◆ Dolby**V: Dolby Virtual, simulates the sound effect of "Dolby Surround Pro Logic".

Off:

More

Flat response.

Treble **Bass**

Less Less

More

Balance 📤 Left Right

Reset

Resets the sound to the factory preset levels.

Dual Sound

- For a stereo broadcast:
 - Mono.
 - Stereo.
 - For a bilingual broadcast:
 - Mono (for mono channel if available).
 - ♣ A (for channel 1).
 - B (for channel 2).

Auto Volume

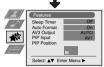
- **◆** Off: volume level changes according to the broadcast signal.
- ◆ On: volume level of the channels will stay the same, independent of the broadcast signal (e.g. in the case of advertisements).

TV Speakers

- On: to listen to the TV from the set speakers.
- ◆ Off: to listen to the TV from an external amplifier connected to the audio outputs on the rear of the TV set.



- If you are listening to the TV through headphones, the "Effect" option will automatically be switched to "Off"
- If you select "Dolby Virtual" on the "Effect" option, the "Auto Volume" option will automatically be switched to "Off" and vice versa.
- * The "BBE High Definition Sound system" is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and BBE Symbol are trademarks of BBE Sound, Inc.
- ** This TV has been designed to create the "Dolby Surround" sound effect by simulating the sound of four speakers with two speakers, when the broadcast audio signal is Dolby Surround encoded. The sound effect can also be improved by connecting a suitable external amplifier (for details refer to "Connecting to external audio Equipment" on page 21).
- ** Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol **DD** are trademarks of Dolby Laboratories.



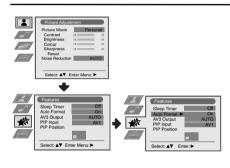


menu allows you to select a time period for the TV to switch itself automatically into the standby mode.

To do this: after selecting the option press \rightarrow , then press \bullet or \bullet to set the time period delay (max. of 4 hours).



- While watching the TV, you can press the \(\begin{aligned} \open \) button on the remote control to display the time
- One minute before the TV switches itself into standby mode, the time remaining is displayed on the TV screen automatically.



AUTO FORMAT

The "Auto Format" option in the "Features" menu allows you to automatically change the aspect ratio of the screen.

To do this: after selecting the option, press \rightarrow . Then press **◆** or **♠** to select **On** (if you wish the TV set to automatically switch the screen format according to the broadcast signal) or Off (if you wish to keep your preference). Finally press **OK** to store.



Even if you have selected "On" or "Off" in the "Auto Format" option, you can always modify the format of the screen by pressing ## repeatedly on the remote control to select one of the following formats:

Smart: Imitation of wide screen effect for 4:3 broadcast.

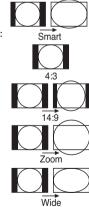
4:3: Conventional 4:3 picture size, full picture information.

14:9: Compromise between 4:3 and 16:9 picture size.

Zoom: Widescreen format for letterbox movies.

Wide: For 16:9 broadcast. Full picture information.

In "Smart", "Zoom" and "14:9" modes, parts of the top and bottom of the screen are cut off. Press \bullet or \bullet to adjust the position of the image on the screen (e.g. to read subtitles).

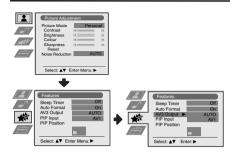


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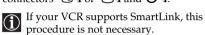
Level 2

Level 3 / Function



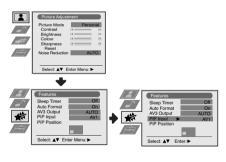
AV3 OUTPUT

The "AV3 Output" option in the "Features" menu allows you to select the source to be output from the Scart connector 3/ 3 so that you can record from this Scart any signal coming from the TV or from an external equipment connected to the Scart connectors \bigcirc 1 or \bigcirc 2 or front connectors + 4 or + 4 and + 4.



To do this: after selecting the option, press . Then press ♥ or ♠ to select the desired output signal: TV, AV1, AV2, AV4, YC4 or AUTO.

- If you select "AUTO", the output signal will always be the same one that is displayed on the screen.
 - If you have connected a decoder to the Scart $\bigcirc 3/\bigcirc 3$ or to a VCR connected to this Scart, please remember to change back the "AV3 Output" to "AUTO" or "TV" for correct unscrambling.



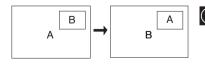
PIP INPUT

The "PIP Input" option in the "Features" menu allows you to select the source you want to watch in the "PIP" screen.

To do this: after selecting the option, press \blacksquare . Then press repeatedly **◆** or **♦** to select the desired source AV1, AV2, AV3, AV4 or TV. Finally press **OK** to store.



To watch the "PIP" screen with the selected source, press the **b**utton on the remote control.



You can swap the screens by pressing the button on the remote control.

Select: ▲▼ Enter Menu: ►

Select: A▼ Enter Menu: ▶

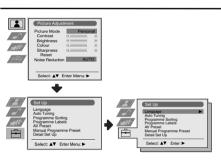
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Select: A▼ Enter: ▶

The "PIP Position" option in the "Features" menu allows you to change the position of the "PIP" screen within the main screen.

To do this: after selecting the option press \blacklozenge , ♠, ♠ or ▶ to select the desired position. Finally press **OK** to store.

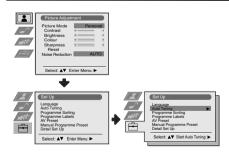




LANGUAGE

The "Language" option in the "Set Up" menu allows you to select the language that the menus are displayed in.

To do this: after selecting the option, press and then proceed in the same way as in step 2 of the section "Switching On the TV and Automatically Tuning" on page 7.



AUTO TUNING

The "Auto Tuning" option in the "Set Up" menu allows you to automatically search for and store all available TV channels.

To do this: after selecting the option, press • and then proceed in the same way as in the steps 4 and 5 of the section "Switching On the TV and Automatically Tuning" on page 8.

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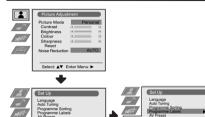
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PROGRAMME SORTING

The "Programme Sorting" option in the "Set Up" menu allows you to change the order in which the channels (TV Broadcast) appear on the screen.

To do this: after selecting the option, press and then proceed in the same way as in step 6 b) of the section "Switching On the TV and Automatically Tuning" on page 8.

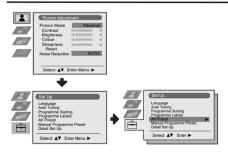


PROGRAMME LABELS

The "Programme Labels" option in the "Set Up" menu allows you to name a channel using up to five characters (letters or numbers).

To do this:

- **1** After selecting the option, press \rightarrow , then press \bullet or \bullet to select the programme number with the channel you wish to name.
- **2** Press **\(\rightarrow \)**. With the first element of the **Label** column highlighted, press \bullet or \spadesuit to select a letter or number (select "-" for a blank), then press • to confirm this character. Select the other four characters in the same way. Finally press **OK** to store.



AV PRESET

The "AV Preset" option in the "Set Up" menu allows you to designate a name to the external equipment you have connected to the input sockets of this TV.

To do this:

- **1** After selecting the option, press ♠, then press \bullet or \bullet to select the input source you wish to name (AV1, AV2 and AV3 are for the rear Scarts and AV4 for front connectors). Then press .
- **2** A label automatically appears in the label column:
 - a) If you want to use one of the 6 predefined label (CABLE, GAME, CAM, DVD, VIDEO or SAT), press ◆ or ♠ to select the desired label and finally press **OK** to store.
 - **b)** If you want to set a different label, select **Edit** and press . Then with the first element highlighted, press \bullet or \spadesuit to select a letter, number or "-" for a blank, then press 🍁 to confirm this character. Select the other four characters in the same way and finally press **OK** to store.



MANUAL PROGRAMME PRESET

The "Manual Programme Preset" option in the "Set Up" menu allows you to:

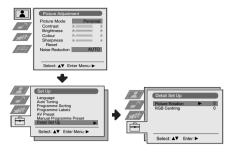
- **a)** Preset channels or the VCR channel one by one to the programme order of your choice. To do this:
- After selecting the "Manual Programme Preset" option, press • then with **Programme** option highlighted press **.** Press • or • to select which programme number you want to preset the channel on (for VCR, select programme number "0"). Then press •.
- **2** After selecting the **Channel** option, press **\(\rightarrow\)**. Then press the number buttons to enter directly the channel number of the TV Broadcast or the channel of the VCR signal. If you do not know the channel number, press \bullet or \spadesuit to search for it. When you have tuned the desired channel, press **OK** twice to store.

Repeat all the above steps to tune and store more channels.

- **b)** Label a channel using up to five characters.
 - To do this: Highlighting the **Programme** option, press the **PROG** +/- button to select the programme number with the channel you wish to name. When the programme you want to name appears on the screen, select the **Label** option and press \spadesuit . Next press \spadesuit or \spadesuit to select a letter, number or "-" for a blank. Press be to confirm this character. Select the other four characters in the same way. After selecting all the characters, press **OK** twice to store.
- **C)** Fine tune the broadcast reception. Normally the automatic fine tuning (AFT) will give the best possible picture, however you can manually fine tune the TV to obtain a better picture reception in case the picture is distorted.
 - To do this: while watching the channel (TV Broadcast) you wish to fine tune, select the AFT option and press \blacklozenge . Next press \blacklozenge or \spadesuit to adjust the fine tuning between -15 and +15. Finally press **OK** twice to store.
- **d)** Skip any unwanted programme numbers when they are selected with the PROG +/buttons.

To do this: Highlighting the **Programme** option, press the **PROG** +/- button to select the programme number you want to skip. When the programme you want to skip appears on the screen, select the Skip option and press . Next press \bullet or $\hat{\bullet}$ to select **Yes.** Finally press **OK** twice to confirm and store.

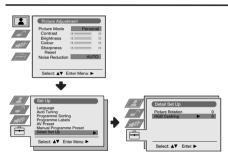
To cancel this function afterwards, select "No" instead of "Yes" in the step above.



PICTURE ROTATION

Because of the earth's magnetism, the picture may slant. If this is the case, you can correct the pictures slant by using the "Picture Rotation" option in the "Detail Set Up" menu.

To do this: after selecting the option, press \blacksquare . Then press \bullet or \bullet to correct any slant of the picture between -5 and +5.



RGB CENTRING

When connecting an RGB source, such as a "PlayStation", you may need to readjust the horizontal position of the picture. If this is the case, you can adjust it through the "RGB Centring" option in the "Detail Set Up".

To do this: while watching an RGB source select the "RGB Centring" option and press . Then press \bullet or \bullet to adjust the centre of the picture between -10 and +10. Finally press **OK** to confirm and store.

Teletext



Teletext is an information service transmitted by most TV stations. The index page of the teletext service (usually page 100) gives you information on how to use the service. To operate teletext, use the remote control buttons as indicated below.



Teletext errors may occur if you use a channel (TV Broadcast) with a weak signal.

To switch on Teletext:

After selecting the TV channel which carries the teletext service you wish to view, press (
).



To select a Teletext page:

Input 3 digits for the page number, using the numbered buttons.

- If you make a mistake, retype the correct page number.
- If the counter on the screen continues searching, it is because the page is not available. If this is the case, input another page number

To access the next or preceding page:

Press $PROG + (\blacksquare A)$ or $PROG - (\blacksquare V)$.

To superimpose teletext on to the TV:

Whilst you are viewing teletext, press

. Press it again to cancel teletext mode.

To freeze a teletext page:

Press \bigcirc / \bigcirc . Press it again to cancel the freeze.

To reveal concealed information (e.g: answer to a quiz):

Press (1+)/(?). Press it again to conceal the information.

To select a sub page:

A teletext page may consist of several sub pages. In this case the page number that appears on the upper left corner will change from white to green and one or more arrows will appear next to the page number. Repeatedly press the ◆ or ◆ buttons on the remote control to watch the desired sub page.

To Switch Off Teletext:

Press \bigcirc .

Fastext



Fastext service lets you access Teletext pages with one button push.

When you are in Teletext mode and Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the appropriate coloured button (red, green, yellow or blue) to access the page corresponding to your menu choice.

NexTView*

*(depending on availability of service).



NexTView is an on-screen electronic programme guide, providing you with programme information for different broadcasters.

When looking for information you can search by theme (sports, art, etc...) or date.

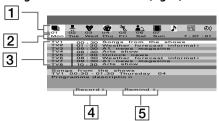


If wrong characters appear when viewing NexTView, use the menu system to enter the "Language" menu (see page 13) and select the same language as the NexTView is broadcasted.

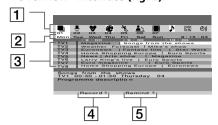
Displaying NexTView

- 1 Select a broadcast channel providing a NexTView service. In this case the indication "NexTView" is displayed as soon as data is available.
- **2** To see NexTView service you have two different types of NexTView interface. These depend on the % of available data:
 - a) "Programme List" interface: Whilst you are watching TV, and after the indication "NexTView" (coloured white) is displayed on the screen, press the D button on the remote control to watch the "Programme List" interface (see fig. 1).
 - b) "Overview" interface: control to watch the "Overview" interface (see fig. 2).
 - As soon as you enter the NexTView service the % of NexTView data available will be As soon as you enter the Next view service the 70 of 1827 (18) and a contract the service, the % shown in the bottom left corner of the screen. Once you have entered the service, the % of data will not increase.
- **3** To navigate through NexTView:
 - moving right or left press or .
 - moving upwards or downwards, press ♥ or ♠.
 - to confirm a selection, press **OK**.
- **4** To switch NexTView off, press the button on the remote control.

"Programme List" interface (fig. 1):



"Overview" interface (fig. 2):



- 1 Icons for different themes (see the "Icons' key" below)
- 2 Date
- 3 Programme list

4 Record*



This function only works if you have connected a VCR which supports SmartLink and Timer Programming feature.

If you wish to record the selected programme, press the red button on the remote control.

5 Remind*

If you wish to be reminded when the selected programme is broadcast, press the green button on the remote control. At the time that programme should be broadcast a reminder message is displayed on the TV.

- Λ
- * "Record" and "Remind" options will be shown on the screen as soon as a programme have been selected, but they will not be shown if you are watching the NexTView service on a TV channel which is not a NexTView provider.
- * "Record" and "Remind" will not be available if the programme that you have selected has already started.

Icons' key:

■ full selection list:

All the programme information is listed by time and broadcast channels order.

- entertainment
- children
- arts
- sports
- news
- movies
- music

民 channel selection:

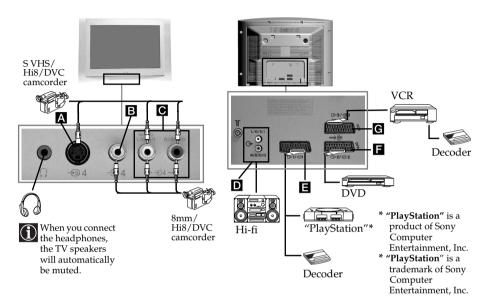
If the NexTView provider sends information of more than 8 broadcast channels, you can select 8 of them to create your personal list. After you have created your personal list, the default list can be restored. To restore it, select "Auto **▶**" by pressing **♦** button on the remote control.

(i) remind list:

Shows you the list with all the programmes (maximum 5 programmes) that you have selected to be reminded about.

Connecting Optional Equipment

Using the following instructions you can connect a wide range of optional equipment to your TV set. (Connecting cables are not supplied).





- To avoid picture distortion, do not connect external equipment to connectors A and B at the same time.
- Do not connect a Decoder to the Scart **E**.
- Games that use a "GUN" attachment to point at the screen do not work correctly due to 100Hz technology used in this television.

Connecting a VCR:

To connect a VCR, please refer to the section "Connecting the aerial and VCR" of this instruction manual. We recommend you connect your VCR using a scart lead. If you do not have a scart lead, tune in the VCR test signal to the TV programme number "0" by using the "Manual Programme Preset" option. (for details of how to manually programme these presets, see page 15, step a).

Refer to your VCR instruction manual to find out how to find the output channel of your VCR.

Connecting a VCR that supports SmartLink:



SmartLink is a direct link between the TV set and the VCR. For more information on SmartLink, please refer to the instruction manual of your VCR.

If you use a VCR that supports SmartLink, please connect the VCR to the TV using a Scart lead to the Scart $\bigcirc 3/\bigcirc 3$

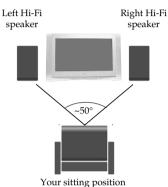
Connecting to external Audio Equipment:

Plug in your Hi-Fi equipment to the audio output sockets **D** if you wish to amplify the audio output from TV. Next, using the menu system, select the "Sound Adjustment" menu and set the "TV Speakers" to "Off" (see page 10).

Audio level of the external speakers can be modified by pressing the volume buttons on the remote control. Also treble and bass settings can be modified through the "Sound Adjustment" menu (see page 10).

To enjoy "Dolby Virtual" sound effect through your Hi-Fi equipment:

Place the speakers of your equipment in front of your listening position and beside the TV set but keeping a distance of 50 cm between each speaker and the TV set. Then by using the menu system, select the menu "Sound Adjustment". Next select "Dolby V" on the "Effect" option (see page 10).



Using Optional Equipment

- Connect your equipment to the designated TV socket, as indicated in the previous page.
- Switch on the connected equipment.
- To watch the picture of the connected equipment, press the f button repeatedly until the correct input symbol appears on the screen.

Symbol Input Signals

- +1 • Audio / video input signal through the Scart connector
- **-**⊕1 • RGB input signal through the Scart connector **E**. This symbol appears only if an RGB source has been connected.
- **€**)2 • Audio / video input signal through the Scart connector **F**.
- RGB input signal through the Scart connector **E**. This symbol appears only **-** ⊕ 2 if an RGB source has been connected.
- **€**3 • Audio/video input signal through the Scart connector **G**.
- €93 • S Video Input signal through the Scart connector **G**. This symbol appears only if an \$ Video source has been connected.
- **€**)4 • Video input signal through the phono socket **B** and Audio input signal through C.
- --\$) 4 • S Video Input signal through the front S Video input jack A and Audio signal through **C**. This symbol appears only if an S Video source has been connected.
- Press Dutton on the remote control to return to the normal TV picture.

For Mono Equipment

Connect the phono plug to the L/G/S/I socket on the front of the TV and select € 4 or € 94 input signal using the instructions above. Finally, refer to the "Sound Adjustment" section of this manual and select "Dual Sound" "A" on the sound menu screen (see page 10).

Remote Control Configuration for VCR/DVD

In it's default condition this remote control will operate the basic functions of this Sony TV, Sony DVDs and most Sony VCRs. To control VCRs and DVDs of other manufacturers (and some Sony VCR models), please complete the following steps:



Before you start, look up the 3 digit code for your brand of DVD or VCR from the list Before you start, 100K up the 3 digit code for your brains of 2.2.2. below. On those brands that have more than one code, enter the first code number.

- Press the Media Selector button on the remote control repeatedly until the required green light (VCR or DVD) is lit.
 - If Media Selector is on TV position, code numbers will not be stored.
- Before the green light goes out, press and hold the yellow button for approximately 6 seconds until the green light starts flashing.
- Whilst the green light is flashing, enter all three digits of the code for your brand of VCR or DVD using the number buttons on the remote control.
 - If your selected code is entered correctly, all three green lights will be lit momentarily.
- **4** Turn on your VCR or DVD and check that the main functions work.



- If your device is not working or some of the functions do not work please check that you entered the correct code set or try the next code listed against the brand.
- Your brand codes may be lost if weak batteries are not replaced within a few minutes. To reset your brand of DVD or VCR please repeat the above steps. A small label is added inside the battery door to allow you to record your brand codes.
- Not all brands are covered and not all models of every brand may be covered.

DVD Brand List

0 2 3 (4) (5) (6) 7 8 0 +# (oK) #→

VCR Brand List

VCN DIAIIU LISU		DVD Brand List		
Brand	Code	Brand	Code	
SONY (VHS)	301, 302, 303, 308, 309	SONY	001	
SONY (BETA)	303, 307, 310	AIWA	021	
SONY (DV)	304, 305, 306	DENON	018, 027, 020, 002	
AIWA	325, 331, 351	GRUNDIG	009, 028, 023, 024, 016, 003	
AKAI	326, 329, 330	HITACHI	025, 026, 015, 004	
DAEWOO	342, 343	JVC	006, 017	
GRUNDIG	358, 355, 360, 361, 320, 351	KENWOOD	008	
HITACHI	327, 333, 334	LG	015, 014	
JVC	314, 315, 322, 344, 352, 353,	LOEWE	009, 028, 023, 024, 016, 003	
	354, 348, 349	MATSUI	013, 016	
LG	332, 338	ONKYO	022	
LOEWE	358, 355, 360, 361, 320, 351	PANASONIC	018, 027, 020, 002	
MATSUI	356, 357	PHILIPS	009, 028, 023, 024, 016, 003	
ORION	328	PIONEER	004	
PANASONIC	321, 323	SAMSUNG	011, 014	
PHILIPS	311, 312, 313, 316, 317, 318,	SANYO	007	
	358, 359	SHARP	019, 027	
SAMSUNG	339, 340, 341, 345	THOMSON	012	
SANYO	335, 336	TOSHIBA	003	
SHARP	324	YAMAHA	018, 027, 020, 002	
THOMSON	319, 350			
TOSHIBA	337			

Specifications

TV system:

Colour system:

PAL

SECAM, NTSC 3.58, 4.43 (only Video In)

Channel Coverage:

I: UHF B21-B69

Picture Tube:

Flat Display FD Trinitron WIDE:

- KV-28FQ70U: 28" (approx. 71 cm mesaured diagonally).
- KV-32FQ70U: 32" (approx. 82 cm mesaured diagonally).

Rear Terminals

 \bigcirc 1/ \bigcirc 1 21-pin scart connector (CENELEC standard) including audio/video input, RĞB input, TV audio/video output.

3 2/ **2** 21-pin Scart connector

(CENELEC standard) including audio / video input, RGB input, monitor audio/video output.

 $\bigcirc 3/\bigcirc 3$ 21-pin Scart (SMARTLINK) connector (CENELEC

standard) including audio / video input, S video input, selectable audio / video output and Smartlink interface.

C+ audio outputs (Left/ Right) - phono jacks

Front Terminals

❸ 4 S Video input – 4 pin

• 4 video input – phono

€) 4 audio input - phono iacks

 Ω headphones jack

Sound Output:

2 x 20 W (music power) 2 x 10 W (RMS)

Woofer:

30 W (music power) 15 W (RMS)

Power Consumption:

- KV-28FQ70U: 125 W
- KV-32FQ70U: 130 W

Standby Power Consumption:

0.3 W

Dimensions (w x h x d):

- KV-28FQ70U: approx. 789 x 533 x 521 mm.
- KV-32FQ70U: approx. 910 x 586 x 586 mm.

Weight:

- KV-28FQ70U:
 - approx. 46.5 Kg.
- KV-32FO70U: approx. 64 Kg.

Accessories supplied:

1 Remote Control (RM-938) 2 Batteries (IEC designated, AA size)

Other features:

- 100 Hz picture, Digital Plus.
- Teletext, Fastext, TOPtext (250 page TEXT memory).
- · Sleep Timer.
- SmartLink (direct link) between your TV set and a compatible VCR. For more information on SmartLink, please refer to the Instruction Manual of your VCR).
- Dolby Virtual.
- BBE Digital.
- PIP.
- · Auto Format.
- ACI (Auto Channel Installation).

Design and specifications are subject to change without notice.

Ecological Paper - Totally Chlorine Free



Troubleshooting



Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark) and no sound.	 Check the aerial connection. Plug the TV in and press the ① button on the front of the TV. If the standby indicator ὑ is on, press TV I/ὑ button on the remote control.
Poor or no picture (screen is dark), but good sound.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to the factory settings (see page 9).
No picture or no menu information from equipment connected to the Scart connector.	• Check that the optional equipment is on and press the ⊕ button repeatedly on the remote control until the correct input symbol is displayed on the screen (see page 21).
Good picture, no sound.	 Press the → + button on the remote control. Check that "TV Speakers" is "On" in the "Sound Adjustment" menu (see page 10). Check that headphones are not connected.
No colour on colour programmes.	• Using the menu system, select the "Picture Adjustment" menu and select "Reset" to return to factory settings (see page 9).
When you switch on the TV the last channel you were watching before switching the TV off does not appear.	This is not a malfunction. Press the number buttons on the remote control to select the desired channel.
Distorted picture when changing programmes or selecting teletext.	• Turn off any equipment connected to the Scart connector on the rear of the TV.
Wrong characters appear when viewing NexTView.	• Use the menu system to enter the "Language" menu (see page 13) and select the same language that NexTView is broadcast in.

Problem	Solution
Picture slanted	• Using the menu system, select the "Picture Rotation" option in the "Detail Set Up" menu to correct the picture slant (see page 16).
Noisy picture when viewing a TV channel.	 Using the menu system, select the "Manual Programme Preset" menu and adjust Fine Tuning (AFT) to obtain better picture reception (see page 15). Using the menu system, select the "Noise Reduction" option in the "Picture Adjustment" menu and select "Auto" to reduce the noise in the picture (see page 19).
Remote control does not function.	 Check that the Media Selector on the remote control is set to the device you are using (VCR, TV or DVD). If the remote control does not operate the VCR or DVD even when the Media Selector has been set correctly. Enter the necessary code set as explained in the "Remote Control Configuration for VCR/DVD" chapter of this instruction manual (see page 22). Replace the batteries.
The standby indicator $\boldsymbol{\circlearrowleft}$ on the TV flashes.	Contact your nearest Sony service centre.

If you continue to experience problems, have your TV serviced by qualified personnel. Never open the casing yourself.

Television Channel Number Guide for United Kingdom



Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contact. channel numbers can be obtained by contacting The BBC Engineering Information Dept., Telephone Number 020 7852 5040.

Distribution Dis	MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4	CH5
⊕ Bluebell Hill						
③Crystal Palace 26 33 23 30 - ③Dtover 50 66 66 53 - ④Dtoathfield 49 52 64 67 - ⑤Doxford 57 63 60 53 49 South-West ************************************		40	46	43	65	_
⑤ Dover 50 56 65 53 - ⑥ Heathfield 49 52 64 67 - ⑥ Oxford 57 63 60 53 49 South-West **** 60 53 49 South-West **** 63 60 53 49 ⑤ Beacon Hill 22 28 25 32 - ⑥ Huntshaw Cross 55 62 59 65 67 ⑥ Rodruth 51 44 41 47 37 ⑥ Stockland Hill 33 26 23 29 - Channel Islands *** 41 47 - - Ø Midhurst 61 55 58 68 -						_
⊕Heathfield 49 52 64 67 — ⊕Oxford 57 63 60 53 49 South-West						_
⑤Oxford 57 63 60 53 49 South-West West South-West						_
South-West So						49
Beacon Hill		37	0.5	00	55	
ÖCaradon Hill 22 28 25 32 − ⊕Huntshaw Cross 55 62 59 65 67 ⊕Rodruth 51 44 41 47 37 ⊕Norchall 33 26 23 29 − Channel Islands ⊕Fremont Point 51 44 41 47 − General Midhurst 61 55 58 68 − ⊕Mowridge 31 24 27 21 − West West West 37 24 21 37 East ⊕Sandy Heath 31 27 24 21 39 ⊕Studbury 51 44 41 47 − ⊕Tacolneston 62 25 59 55 22 Midlands (West) ⊕Ridge Hill 22 28 25 32 − ⊕Norther Ireland 28 28 25 32 −		57	63	60	53	_
⊕Huntshaw Cross 55 62 59 65 67 ⊕Redruth 51 44 41 47 37 ⊕Stockland Hill 33 26 23 29 − ⊕Hannington 39 45 42 66 − ⊕Midhurs 61 55 58 68 − ⊕Mest 61 55 58 68 − ⊕Mest 7 21						_
						67
⊕Stockland Hill 33 26 23 29 − Channel Islands UPTermont Point 5 44 41 47 − South 9 45 42 66 − ⊕Manington 39 45 42 66 − ⊕Mowridge 31 24 27 21 − West 29 46 61 54 37 East 8 64 61 54 37 ©Stadbury 51 44 41 47 − ⊕Tacolneston 62 55 59 65 52 Midlands (West) 44 41 47 − − ⊕Sutbury 51 44 41 47 − − ⊕Sutbury 51 44 41 47 − − − − − − − − − − − − − − <						
Channel Islands						_
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⊕Sudbury 51 44 41 47 - □ ⊕Tacolneston 62 55 59 66 52 ⊕Midlands (West) ⊕Midlands (Hill 22 28 25 32 - □ ⊕Sutton Coldfield 46 40 43 50 - □ ⊕Midlands (East) ⊕Widthath 58 64 61 54 - □ ⊕Midlands (East) ⊕Widthath 58 62 59 65 - □ ⊕Midlands (East) ⊕		21	27	24	21	20
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Worthern Ireland 58 64 61 54 − Northern Ireland 22 28 25 32 − ②Divis 31 27 24 21 − ②Limavady 55 56 29 65 − North 3 22 28 25 32 56 ②Emley Moor 44 51 47 41 37 North-West 38 26 29 23 − ③Winter Hill 33 26 29 23 − ③Caldbed 33 26 29 23 − ③Chalbed 39 45 49 42 − ③Chalbed 30 34 28 32 56 ④Chalton 39 45 49 42 − ③Chalbed 30 46 40 53 − ⑤Angus 57 63 60 53 − </td <td></td> <td>26</td> <td>33</td> <td>23</td> <td>29</td> <td>-</td>		26	33	23	29	-
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©Emley Moor						
North-West Syminter Hill S5 G2 S9 G5 A8 North-East Syminter Hill Syminter						
Winter Hill 55 62 59 65 48 North-East 33 26 29 23 5 ©Caldbeck 30 34 28 32 56 ⊕Chatton 39 45 49 42 - ⊕Pontop Pike 58 64 61 54 - Scotland 3 60 53 - ⊕Black Hill 40 46 43 50 37 ⊕Scaldbeck _ _ _ 2 28 32 56 ⊕Caldbeck _ _ _ 2 24 21 48 ⊕Caraigkelly 31 27 24 21 48 ⊕Durris 22 28 23 29 - ⊕Eishal (Lewis) 33 26 23 29 - ⊕Eishal (Lewis) 33 26 23 29 - ⊕Kosch More 33 26		44	51	47	41	37
Solution						
® Bilsdale West Moor 33 26 29 23 − ® Caldbeck 30 34 28 32 56 ® Chatton 39 45 49 42 − ® Pontop Pike 58 64 61 54 − Scotland 3 60 53 − ® Angus 57 63 60 53 − ® Sandale 22 26 − − − − ® Caldbeck − 28 32 56 ® Craiglely 31 27 24 21 48 ® Darvel 33 26 23 29 − ® Caldbeck 2 22 28 25 32 67 © Eirshal (Lewis) 33 26 23 29 − ® Koselylang Hill 40 46 43 50 − ® Rosemarkie 39 45 49 42 <		55	62	59	65	48
Goldbeck 30 34 28 32 56 ⊕Chatton 39 45 49 42 - ⊕Pontop Pike 58 64 61 54 - Scottand 30 30 35 - - - 28 32 50 37 35 37 39 38 32 50 37 39 36 6 53 7 - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
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Secondar 58 64 61 54 − Scotland 3 60 53 − Sangus 57 63 60 53 − Selandale 22 67 − − − − SCaldbeck _ _ 2 83 32 56 SCaraigkelly 31 27 24 21 48 SDarvel 33 26 23 29 − Durris 22 28 25 32 67 Eisthal (Lewis) 33 26 23 29 − ØKscelvlang Hill 40 46 43 50 − ØRosemarkie 39 45 49 42 − ØSelkirk 55 62 59 65 52 Wales 5 24 21 5 ØCarmel 57 63 60 53 −						56
Scotland						-
③ Angus 57 63 60 53 - ⑤ Black Hill 40 46 43 50 37 ⑤ Sandale 22 67 - - - ⑥ Craigkelly 31 27 24 21 48 ⑥ Darvel 33 26 23 29 - ⑨ Diburris 22 28 25 32 67 ⑨ Eitshal (Lewis) 33 26 23 29 - ⑨ Keelylang Hill 40 46 43 50 - ⑨ Rosemarkie 39 45 49 42 - ⑨ Rosemarkie 39 45 49 42 - ⑨ Selkirk 55 62 59 65 52 Wales 89 45 49 42 - ⑨ Carmel 57 63 60 53 - ⑨ Carmel 57 63 60 53 -		58	64	61	54	-
⊕Black Hill 40 46 43 50 37 ⊕Scaldbeck — — 28 32 56 ⊕Craigkelly 31 27 24 21 48 ⑤Darvel 33 26 23 29 — ⑥Durris 22 28 25 32 67 ⑥Eitshal (Lewis) 33 26 23 29 — ⑥Kockelylang Hill 40 46 43 50 — ⑥Kock More 33 26 23 29 — ⑥Kock More 33 26 23 29 — ⑥Sclkirk 55 62 23 29 — ⑥Sclkirk 55 62 59 65 52 Wales ⑥Blaenplwyf 31 27 24 21 — ⑥Carmel 57 63 60 53 — ⑥Landdona 57 63 60						
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Goldbeck _ _ 28 32 56 ②Craigkelly 31 27 24 21 48 ③Darvel 33 26 23 29 - ④Durris 22 28 25 32 67 ⑥Eitshal (Lewis) 33 26 23 29 - ⑥Kocklylang Hill 40 46 43 50 - ⑥Rosemarkie 39 45 49 42 - ⑥Selkirk 55 62 59 65 52 Wales W 42 21 - ⑥Carmel 57 63 60 53 - ⑥Llanddona 57 63 60 53 - ⑥Moel-y-Parc 52 45 49 42 -				43	50	37
©Craigkelly 31 27 24 21 48 ⑤Darvel 33 26 23 29 - ⑥Durris 22 28 25 32 67 ⑥Eitshal (Lewis) 33 26 23 29 - ⑥Keelylang Hill 40 46 43 50 - ⑥Knock More 33 26 23 29 - ⑥Kosemarkie 39 45 49 42 - ⑥Selkirk 55 62 59 65 52 Wales ⑥Baenplwyf 31 27 24 21 - ⑥Baenplwyf 31 27 24 21 - ⑥Carmel 57 63 60 53 - ⑥Landdona 57 63 60 53 - ⑥Moel-y-Parc 52 45 49 42 - ⑥Presely 46 40 43 50 37		22	67	-	-	-
⑤ Darvel 33 26 23 29 - ⑤ Durris 22 28 25 32 67 ⑥ Eitshal (Lewis) 33 26 23 29 - ⑥ Keelylang Hill 40 46 43 50 - ⑥ Knock More 33 26 23 29 - ⑥ Rosemarkie 39 45 49 42 - ④ Rumster Forest 31 27 24 21 - ⑥ Selkirk 55 62 59 65 52 Wales ⑥ Carmel 57 63 60 53 - ⑥ Landdona 57 63 60 53 - ⑥ Moel-y-Parc 52 45 49 42 - ⑥ Presely 46 40 43 50 37		_	-			
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⊕ Eitshal (Lewis) 33 26 23 29 - ⊕ Knockelylang Hill 40 46 43 50 - ⊕ Knock More 33 26 23 29 - ⊕ Rosemarkie 39 45 49 42 - ⊕ Schikirk 55 62 59 65 52 Wales ⊕ Blaenplwyf 31 27 24 21 56 ⊕ Carmel 57 63 60 53 - ⊕ Moel-y-Parc 52 45 49 42 - ⊕ Moel-y-Parc 52 45 49 42 - ⊕ Presely 46 40 43 50 37						-
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⊕ Knock More 33 26 23 29 - ⑤ Rosemarkie 39 45 49 42 - ⑥ Rumster Forest 31 27 24 21 - ⑤ Selkirk 55 62 59 65 52 Wales ⑥ Blaenplwyf 31 27 24 21 56 ⑦ Carmel 57 63 60 53 - ⑥ Landdona 57 63 60 53 - ⑥ Moel-y-Parc 52 45 49 42 - ⑥ Presely 46 40 43 50 37	40 Eitshal (Lewis)	33	26			-
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∳§selkirk 55 62 59 65 52 Wales 8 8 9 65 52 ⊕Blaenplwyf 31 27 24 21 56 ⊕Carmel 57 63 60 53 - ⊕Moel-y-Parc 52 45 49 42 - ⊕Presely 46 40 43 50 37	43 Rosemarkie	39		49	42	-
Wales 31 27 24 21 56 ⊕Carmel 57 63 60 53 - ⊕Landdona 57 63 60 53 - ⊕Moel-y-Parc 52 45 49 42 - ⊚Presely 46 40 43 50 37	Rumster Forest	31	27	24	21	-
 ⊕Blaenplwyf ⊕Carmel ⊕Carmel ⊕Carmel ⊕Model-y-Parc ⊕Model-y-Pare ⊕Model-y-Pare ⊕Presely 46 40 43 50 37 		55	62	59	65	52
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(B) Llanddona 57 63 60 53 - (B) Moel-y-Parc 52 45 49 42 - (B) Presely 46 40 43 50 37		57	63	60	53	-
 Moel-y-Parc 2 45 49 42 - Presely 46 40 43 50 37 	48Llanddona	57	63	60		-
50 Presely 46 40 43 50 37		52	45	49	42	-
⑤ Wenvoe 44 51 41 47 -		46	40	43	50	37
	⑤ Wenvoe	44	51	41	47	-



